Public Water System ID # CO0101025

2015 Drinking Water Quality Report

Esta es informacion importante. Si no la pueden leer, necesitan que alguien se la traduzca

The City of Brighton is pleased to present the 2015 Water Quality Report. This report details where our water comes from and what it contains, from data collected throughout 2014.
Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact Dave Anderson at 303-655-2102 with any questions about the Drinking Water Consumer Confidence Report (CCR) or for public participation opportunities that may affect the water quality. Brighton's Water Department is committed to providing its customers with high quality drinking water. We feel that it is important for you and your family to be aware of how that quality is maintained and to feel comfortable with, and informed about, the water treatment process.

Our Source Water

Brighton's drinking water comes from three main sources; alluvial wells in the South Platte River Basin, additional alluvial wells in the BeeBe Draw Alluvium just below Barr Lake, and treated water from the City of Thornton through a contract with the City of Westminster. Alluvial groundwater is generally very clean and palatable. It typically lacks many of the contaminants that can be found in surface water, because soils can act as a natural filter. You can help protect our water supplies by limiting the use of pesticides, fertilizers and outdoor chemicals. Remember, anything that is poured onto the ground or in the streets has the potential for reaching the alluvium.

Source Water Assessment Report

The Colorado Department of Public Health and Environment has provided us with a Source water Assessment Report for our water supply. You may obtain a copy of the report by visiting **http://wqcdcompliance.com/ccr** The report is located under "Source Water Assessment Reports" and then "Assessment Report by County" Select ADAMS County and find 101025; BRIGHTON CITY OF or by calling David Anderson at 303-655-2102. The Source Water Assessment Report provides a screening level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. For a list of public meetings ***Visit us online at www.brightonco.gov***. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Terms and Abbreviations

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children) it is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead

Definitions

Action Level (**AL**): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (**MCL**): The "maximum allowed" is the highest level of a contaminant that is allowed in drinking water. MCL are set as close to the MCLG as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (**MCLG**): The "goal" is the level of a contaminant in drinking water, below which there is no known or expected risk to health. MCLG allow for a margin of safety.

Maximum Residual Disinfectant Level (**MRDL**): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Non-Detects (**ND**) or **Below Detection Level** (**BDL**): Laboratory analysis indicates that the constituent is not present. ("<" Symbol for less than, the same as ND or BDL)

Not Tested (**NT**): Not tested.

Parts per billion (**ppb**) or **Micrograms per liter** (**mg/l**): One part per billion corresponds to one minute in 2,000 years, or one penny in $10,000,000.

Parts per million (**ppm**) or **Milligrams per liter** (**mg/l**): One part per million corresponds to one minute in two years or one penny in $10,000.

PicoCuries per Liter (**pCi/l**): A measure of radioactivity in water.

Detected Contaminants

The City of Brighton routinely monitors for contaminants in your drinking water according to Federal and State laws The following tables show all detections found in the period of January 1 to December 31, 2014 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are low and not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report. **Note:** Only detected contaminates sampled within the last five years appear in this report. If no tables appear in this section then no contaminates were detected in the last round of monitoring

Inorganic Contaminates Sampled at the Entry Point to the Distribution System

Contaminant Name	YEAR	Average of Individual Samples	Range of Individual Samples (Lowest—Highest)	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Source
BARIUM	2014	.01	.01 — .02	2	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	2014	.73	.73 — .73	2	ppm	4	4	No	Runoff from fertilizer use, sewage, erosion of natural deposits
NITRATE	2014	5.02	3.0 — 6.2	8	ppm	10	10	No	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits
ARSENIC	2014	1	0 - 2	2	ppb	10	0	No	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
CHROMIUM	2014	1	0 — 2	2	ppb	100	100	No	Discharge from steel and pulp mills, erosion of natural deposits
SELENIUM	2014	.5	0—1	2	ppb	50	50	No	Discharge from petroleum and metal refineries, erosion of natural deposits, discharge from mines

Disinfection Byproducts Sampled in the Distribution System

Contaminate Name	Year	Average	Range Low—High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2014	24.24	7.6 to 42.23	16	ppb	60	N/A	No	By-product of drinking water disinfection
TTHM	2014	49.82	28.8 to 100.3	16	ppb	80	N/A	No	By-product of drinking water disinfection

Lead and Copper Sampled in the Distribution System

Contaminate Name	Monitoring Period	90th Percentile	Number of Samples	Unit of Measure	AL	Sample Sites Above Action Level	Typical Source
COPPER	7/21/2014 To 8/1/2014	.4	30	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaking from wood preventives
LEAD	7/21/2014 To 8/1/2014	2	30	ppb	15	0	Corrosion of household plumbing Systems; Erosion of natural deposits

Summary of Turbidity Sampled at the Entry Point to the Distribution System

Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation	Typical Source
TURBIDITY	May, 2014	Highest single measurement: .255 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
TURBIDITY	December, 2014	Lowest monthly percentage of samples meeting TT requirements for our technology: 100%	In ant month at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff

Radionuclide's Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low—High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources
Gross Alpha	2013	5.7	4.1 to 7.3	2	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2013	0.15	0.1 to 0.2	2	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2013	5.02	3.3 to 3.4	2	pCi/L	30	0	No	Erosion of natural deposits

Volatile Organic Contaminates Sampled at the Entry Point to the Distribution System

Contaminant Name	YEAR	Average of Individual Samples	Range of Individual Samples (Lowest—Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Source
ETHYLBENZENE	2014	.25	0 — .5	6	ppb	700	10	No	Runoff from fertilizer use, sewage, erosion of natural deposits
XYLENES, TOTAL	2014	1.48	0 — 2.2	6	ppb	10000	100	No	Discharge from steel and pulp mills; Erosion of natural deposits.

Microorganism Contaminates Sampled in the Distribution System

Contaminant Name	Monitoring Period	% of Samples Beyond Level	Sample Size	MCL	MCLG	MCL Violation	Typical Sources
Coliform (TCR)	November 2014	3.45	87	No more than 5.0% positive samples per period (If sample size is greater than or equal to 40) **OR** No more than 1 positive sample period (if sample size is less than 40)	0	No	Naturally present in the environment

Violations, Significant Deficiencies, and Formal Enforcement Actions

Violations

Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL
Coliform (TCR)	Monitoring (TCR) Repeat Major—Monitoring & Reporting	11/01/2014—11/30/2014	N/A	N/A	N/A

Additional Violation Information

The noted violation was for the failure to collect and test the required repeat samples within 24 hours of a positive coliform result. There were extenuating circumstances that prevented the analysis of this sample due to a Holiday. Subsequent sampling failed to confirm the original positive coliform result s, resulting in no Coliform violation.

Note: If any violation relates to failing to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes then the water may be inadequately treated. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites, which can cause symptoms such as nausea, cramps, diarrhea and associated headaches. Explanation of the violation(s) and the steps taken to resolve them.

General Information About Drinking Water

"All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. More information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791. Or by visiting http://water.epa.gov/drink/contaminants.

Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally -occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, can be naturally occurring or be the result of oil and gas production and mining activities."

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Our Water Sources

Purchased Water From Thornton	Consecutive Connection	Surface Water
Well 7R	Well	Ground Water
Well 11	Well	Ground Water
Well 12	Well	Ground Water
Well 13	Well	Ground Water
Well 17	Well	Ground Water
Beebe Well A	Well	Groundwater UDI Surface Water
Beebe Well B	Well	Groundwater UDI Surface Water
Beebe Well C	Well	Groundwater UDI Surface Water

Brighton's Water Treatment Facility

Brighton

Postal Customer
Brighton, Colorado 80601

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